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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|--|----------------------|-----------------------|------------------|
| 09/630,024 | 07/31/2000 | Kevin L. Farley | TAN-2-1502.01.US 4041 | |
| 24374 VOLPE AND I | 7590 07/19/201 KOENIG, P.C . | EXAMINER | | |
| DEPT. ICC | , , | CHAN, RICHARD | | |
| UNITED PLAZ 30 SOUTH 17T | | ART UNIT | PAPER NUMBER | |
| PHILADELPH | IA, PA 19103 | 2618 | | |
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| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | 07/19/2011 | ELECTRONIC | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| Office Action Summary | | Applicatio | n No. | Applicant(s) | | | | |
|--|--|----------------|--|---------------------|--------------|--|--|--|
| | | 09/630,02 | 4 | FARLEY ET AL. | | | | |
| | | Examiner | | Art Unit | | | | |
| | | RICHARD | | 2618 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| 1) ズ | Responsive to communication(s) filed on <u>04 M</u> | av 2010 | | | | | | |
| , — | This action is FINAL . 2b) ☐ This action is non-final. | | | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| ٠,٣ | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| | · | | .,,, | | | | | |
| Disposit | ion of Claims | | | | | | | |
| 4) 🛛 | Claim(s) 44-57,59,62,64 and 66-74 is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) | S) Claim(s) is/are allowed. | | | | | | | |
| 6)🛛 | 6) Claim(s) <u>44-56,59,62,64 and 66-71</u> is/are rejected. | | | | | | | |
| 7) 🛛 | Claim(s) 57 and 72-74 is/are objected to. | | | | | | | |
| 8) | Claim(s) are subject to restriction and/or | r election re | quirement. | | | | | |
| Application Papers | | | | | | | | |
| 9) | The specification is objected to by the Examine | r. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| | Replacement drawing sheet(s) including the correcti | ion is require | d if the drawing(s) is obj | ected to. See 37 CF | FR 1.121(d). | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| 2) | nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date | | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | | |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 45-56 and 58-71 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 44-50, 56, 58, 62 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHaughnessy (US 6,141,347) in view of Shaheen et al. (US 6,128,490) in view of Ichikawa et al. (US 6,307,837).

Regarding claim 44, 49, 58, 64Shaughnessy discloses the method implemented in a subscriber unit, wherein a group comprises a plurality of subscriber units (see Col.5, lines 13-20, col.5 lines 60-67, col.6 lines 7-12, col.7 lines 32-52, col.3 lines 7-33, col.4 lines 17-42, col.4 lines 62-67, col.5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area).

However the Shaughnessy reference does disclose, the method comprising: receiving a group indication message, from a base station via a first one of a plurality of wireless channels, the multicast group indication message identifying a connection identifier associated with a message, wherein the connection identifier indicates a second one of the plurality of wireless channels over which to receive the message.

The Shaheen reference however discloses a wireless communication system and subscriber unit that support selection of operation from multiple frequency bands and multiple protocols and method of operation, specifically receiving a group indication message (Col.3 line 57-63) via a first one of a plurality of wireless channels, the multicast group indication message identifying a connection identifier (selected frequency band) associated with a message, wherein the connection identifier indicates a second one of the plurality of wireless channels over which to receive the message. (Col.4 line 11-22)

It would have been obvious to one of ordinary skill in the art to implement the ability to broadcast a set of available frequency selections available for communication as disclosed by Shaheen to the communication system of Shaughnessy in order to have broadcast instructions regarding channel allocations.

However, both Shaughnessy and Shaheen combined specifically disclose wherein a multicasting group indication message is being sent from a base station, the Ichikawa reference however specifically discloses wherein a base station is transferring a broadcast packet or said multicast packet, encryption and decoding are carried out using an encryption key is assigned to each identifier. (Claim 7 of ichikawa)

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It would have been obvious at the time of the invention to implement the ability for a base station to send out a multicast message to all the units in the communication with a identifier packet as disclosed by Ichikawa in order send instructions to all the mobile units from the base station unit of Shaughnessy and Shaheen.

Regarding claim 45, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 44, Shaheen continues to disclose further comprising- receiving the multicast message via the indicated second one of the plurality of wireless channels.

(Col.4 line 11-22)

Regarding claim 46, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 44 Shaheen continues to disclose the method further comprising, receiving the multicast message concurrently with other subscriber units in the multicast group. (Col.4 line 11-22)

Regarding claim 47, 50, 56, 62, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 44, Shaheen continues to disclose wherein the second one of the plurality of wireless channels is a dedicated channel. (Col.4 line 13-18)

Regarding claim 48, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 44, Shaughnessy continues to disclose the method wherein only a

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subscriber unit associated with the multicast group decodes the multicast message received over the second wireless channel. (Col.5, lines 13-20)

4. Claims 51-54, 66-68, 70, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy (US 6,141,347) in view of Shaheen et al. (US 6,128,490) in view of Ichikawa et al. (US 6,307,837) in view of Doeringer et al. (US 5,361,256).

Regarding claim 51, 66, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 49, however both references combined does not disclose the method further comprising: performing a lookup in a routing table adapted to store entries associating a multicast group with the connection identifier; and performing a lookup in a table adapted to associate the connection identifier with the at least one subscriber unit.

The Doeringer reference, specifically claim 2, however discloses wherein a multicast routing table is implemented in order to rout connections based on a prefix corresponding identifier of each subgroup. (Col.17 line 62-67)

It would have been obvious to one of ordinary skill in the art to implement the multicast routing table as disclosed by Doeringer to the method disclosed, Shaheen, and Ichikawa combined in order to relay multicast messages based on address listed on the routing table.

Regarding claim 52, 67, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 49, Doeringer specifically discloses the method further comprising: receiving a join group request from a subscriber unit; and adding an entry in the table indicative of an association between the multicast group and the subscriber unit. (Col.17 line 62-67)

Regarding claim 53, 68, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 49, Doeringer specifically discloses the method further comprising: scanning the multicast message; and parsing a group address in response to a determination that the multicast message is directed to the multicast group. (Col.16 line 23-40)

Regarding claim 54, Shaughnessy, Shaheen, and Ichikawa combined disclose the method of claim 49, Doeringer specifically discloses the method further he method of claim 53 wherein the group address conforms to a protocol and the multicast message is parsed in accordance with the protocol. (Col.16 line 23-40)

5. Claims 55, 70, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy (US 6,141,347) in view of Shaheen et al. (US 6,128,490) in view of Doeringer et al. (US 5,361,256) in view of Okanoue (US 6,477,149).

Regarding claim 55, 70, Shaughnessy, Shaheen, Ichikawa, and Doeringer combined disclose the method of claim 54, however no reference specifically disclose wherein the protocol is the Internet Group Management Protocol (IGMP).

The Okanoue reference discloses wherein the IGMP protocol is implemented in a multicasting environment.

It would have been obvious at the time of the invention to imp0lement the widely known IGMP protocol to the method disclosed by Shaughnessy, Shaheen, Doeringer combined in order parse device address's to direct traffic based on a standard protocol.

Regarding claim 71, Shaughnessy, Shaheen, Ichikawa, Doeringer and Okanoue combined disclose the method of claim 44, Shaheen continues to disclose wherein the second one of the plurality of wireless channels is a dedicated channel. (Col.4 line 13-18)

Allowable Subject Matter

6. Claims 57, 72, 73, and 74 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

1. Please refer to 37 CFR 1.6(a) (4), 1.6(d) and 1.8(a) (2) for filing limitations concerning transmissions via EFS-Web, facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD CHAN whose telephone number is (571)272-0570. The examiner can normally be reached on Mon-Fri 10AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NAY A MAUNG/ Supervisory Patent Examiner, Art Unit 2618 /RICHARD CHAN/ Examiner, Art Unit 2618 7/15/2011